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#### **GOLF GLOVE**

# Technical Field

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The present invention relates to golf gloves. More particularly, the present invention relates to golf gloves having improved fixability and compactability for a grip, which may provide fixability and stable compactability with a small power when a golfer grasps a grip of a golf club, and may position a thumb and an index finger at a proper grip location.

# Background Art

Conventional golf gloves have been manufactured in priority to quality of materials and feeling transmitted to the golfer's hands when the golfer grasps a golf club. Therefore, in fact, in the golf field, there has been a remarkable development in tactile sensation and quality of materials. However, as people who enjoy golf and quantity of motion increase, fatigue of the golfer's hands increases, and there occur various diseases such as Stenosing tenosynovitis, commonly known as 'trigger finger' (injury to a ligament of a little finger portion). Furthermore, in view of the present status where golf technology becomes scientific and high-tech, it is required to develop golf gloves with more improved function through a structural development besides the tactile sensation of the golf gloves.

Currently, most golfers want golf gloves which may provide the solid feeling as if golfers do not wear them, even when golfers wear them. That is, golfers prefer golf gloves which may transmit the touch for a grip sensibly, and are smooth without slippery and durable with thinness, thereby long-lasting.

Swings of the past have required rhythmic senses of swings and sensational strength. On the other hand, swings of today require the mutual balance between a turn of the body and a centrifugal force of arms through a more scientific method.

Swings of today like above depend on how golfers use their hands. As a matter of fact, golfers have regulated the strength of hands grasping a golf club sensibly and then got a grip. However, swings of today put more importance on an issue how to make hands grasping a golf club and the golf club integrated naturally and firmly.

In order to achieve the above object, disclosed are a lot of golf gloves with

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enhanced functions.

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Prior arts based on functions will be outlined as follows. Korean Utility Model Application No. 20-2003-0005706 discloses a golf glove having the back hand part made of elastic net. In the golf glove having the back hand part made of the elastic net, the bottom part surrounding the palm portion and the lower portion of a wrist portion is made of synthetic resin fabric of weak elasticity, and the back hand part surrounding the back of the hand and the upper portion of the wrist is made of the elastic net. Moreover, an open part for allowing an easy wearing and a bonding part for bonding the open part are located at a region where surrounds the end portion of the wrist portion of the bottom part, have excellent air-permeability, allow smooth movement of fingers, and remove oppressive sensation when the golfer wears the gloves.

Korean Utility Model Application No. 20-2002-0021038 discloses a golf glove for maintaining right swing posture. The golf glove includes: an interior grip grasping indication part formed at a portion of a region where four fingers excepting the thumb meet with the palm part; a 'V'-shaped exterior grip grasping indication part formed on the thumb portion and the index finger portion of the back hand part; a straight direction point formed on the root between the index portion and the middle finger portion of the back hand part; and a swing posture guide table attached on the lower end of the back hand part. The golfer grasps the grip along the interior grip grasping indication part. At this time, the exterior grip grasping indication part forms the 'V' shape between the thumb portion and the index finger portion of the back hand part, and the golfer fixes the back of the hand in such a manner to see the straight direction point of the index finger portion and the middle finger portion of the back hand part so that the golfer grasps the grip in a proper swing posture. After that, the golfer sees the swing posture guide table attached on the lower end of the back hand part, and swings the golf club to hit the ball as described in the table. Therefore, the prior art may help the golfer to always swing in the right swing posture.

Korean Patent Application No. 10-2001-0033058 discloses a golf glove for fixing a grip. The golf glove includes: a glove body having detachable fastener fixing portions, the faster fixing portions being respectively disposed on the middle finger portion, ring finger portion, little finger portion and thumb portion of the back hand part

put on a golfer's hand grasping an end portion of a grip of a golf club; an elastic band body of a predetermined width for maintaining grasping power of the three finger portions by surrounding and fixing the exterior side of the three finger portions at proper pressure, the band body having detachable fasteners mounted at both end portions thereof, the detachable fasteners being bonded to and separated from the detachable fastener fixing portions in correspondence with the detachable fastener fixing portion; and a grip band connected with the glove body. The prior art may allow the golfer to maintain grasping power to the essential portion of the grip by the grip band without regard to the golfer's physical condition by surrounding and fixing the grip band to the glove body, thereby allowing the golfer to grasp the grip in a natural condition, minimizing instable hit and loss of driver distance, and maintaining the golfer's grasping condition as it is.

Korean Patent Application No. 10-1995-7001152 discloses a golf glove with marks formed on the rear surface of the golf glove corresponding to a golfer's knuckle portions, whereby the golfer may easily see the marks. The golf glove allows the golfer to immediately recognize a position of his/her knuckle located at a desired position on a grip of a golf club. The marks are indicated on the golf glove, or for the marks, pieces of fabric are arranged on the golf glove to be easily shown.

Additionally, there are lots of golf gloves such as golf gloves for minimizing bending of the wrist by having a fixing rod between the back hand part and the wrist part, golf gloves having good compactability with the golfer's hands by providing various rubber bands, and the like.

As described above, various types of golf gloves with lots of functions have been developed, however, a highly functional golf glove is required, which may reduce fatigue of the gofer's hands caused by long-time exercise by increasing fixability to the golf club, and allow the golfer to grasp the golf club in an exact and stable condition by controlling a grip grasping posture.

### Disclosure of the Invention

# 30 Technical Questions

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The present invention is conceived to solve the aforementioned problems. Therefore, the present invention provides golf gloves which may efficiently assist an

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updated swing method.

The present invention provides golf gloves which enable a strong grip with a little grasping power, by reflecting the anatomy of the body.

The present invention provides golf gloves which may maintain a grip at the certain strength regardless of any change in a golfer's feeling, such as mental tension.

Furthermore, the present invention provides golf gloves which may slowly respond to the surroundings in performing a swing, by maintaining a little tension to hands with gloves on.

### 10 Technical Solutions

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A golf glove of the present invention comprises a base part formed in a shape of a general glove, and a filling part formed on one portion of the base part. The base part may be formed into five fingers or other figures, and the filling part may be formed using the same materials to the base part or different materials. In case that the base part and the filling part are formed using respectively different materials, leather, fabrics, synthetic resin or the like may be used. For example, leather or fabrics may be attached to the base part by methods of sewing, binding, or sewing/biding. Synthetic resin may be coated over the base part to form a coating layer.

More particularly, the filling part is formed on a region corresponding to a groove between a thumb and an index finger, one portion of dorsal surface and palmar surface of the thumb and the index finger, and the lower part of the index finger and the thenar of the thumb of the palm.

Golf gloves of the present invention may increase compactability to a grip with a small grasping power when a golfer grasps a golf club by making the thenar portion thicker than other palm portion of the golf glove and prevent an idle rotation of the golf club by increasing compactability of the thenar portion to the grip. In addition, golf gloves of the present invention may locate the index finger portion and the thumb portion at the right positions naturally when the golfer grasps the golf club by integrating the root between the index finger portion and the thumb portion and the upper part thereof and making them thicker for the golfer's stable and exact grasping, thereby minimizing fatigue caused by long-time exercise and preventing improper grasping of the grip.

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# **Brief Description of the Drawing**

- FIG. 1 is a front and rear view for explaining golf gloves according to one embodiment of the present invention.
- FIG. 2 is a side view for explaining the golf glove of FIG. 1, and FIG. 3 is a sectional view of the golf glove of FIG. 1.
  - FIG. 4 is a sectional view of another golf glove which is similar to the golf glove of FIG. 1, according to another embodiment.
  - FIG. 5 is a front and rear view for explaining a soft implant material in golf gloves according to one embodiment of the present invention.
    - FIG. 6 is a sectional view of the golf glove of FIG. 5.
  - FIG. 7 is a side view for explaining an example of conventional general golf gloves.
  - FIG. 8 is a side view for explaining an example of golf gloves according to one embodiment of the present invention.
    - FIG. 9 is a plan view for explaining an example of general golf gloves of FIG. 7.
    - FIG. 10 is a side view for explaining an example of golf gloves of FIG. 8.
  - FIG. 11 is a front and rear view for explaining golf gloves according to one embodiment of the present invention.
    - FIG. 12 is a side view for explaining an example of golf gloves of FIG. 11.
- FIG. 13 is a partially enlarged view for explaining a connection between a first filling part and a second filling part of FIG. 11.

## Best Mode for Carrying Out the Invention

Hereinafter, the present invention will be in detail described with reference to the accompanying drawings. However, the present invention is not limited by embodiments. For your understanding, the present invention will be described on the basis of a right-handed person and the following description may be applied to a lefthanded person.

FIG. 1 is a front and rear view for explaining golf gloves according to one embodiment of the present invention. FIG. 2 is a side view for explaining the golf glove of FIG. 1, and FIG. 3 is a sectional view of the golf glove of FIG. 1.

Referring to FIGS. 1 to 3, the golf glove comprises a base part 2 and a filling

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part 10. The base part 2 has general thickness and is formed in a shape of a general glove having five finger portions. The base part 2 corresponds to a region including a middle finger, a ring finger, a little finger, a palm and a back hand of the left hand, wherein the palm and the back hand are connected with the three fingers. The filling part 10 covers a region corresponding to the first knuckle of the index finger and the first knuckle of the thumb. The filling part 10 also covers roughly the left half of a palm, preferably a region corresponding to the lower part of the index finger of the palm and the thenar of the palm. Therefore, one portion where the filling part 10 is formed has a comparatively thicker thickness than another portion where only the base part 2 exists.

Accordingly, the filling part 10 connects first knuckle portions 11 and 12 of the thumb and the index finger, a thenar portion 13 of the thumb, and a wrist portion14 in the base part 2.

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The base part 2 is formed using a common material, such as leather, synthetic leather and the like, and has a normal thickness like a general golf glove. That is, the base part 2 has the similar structure and material as the typical golf gloves.

The filling part 10 is made of the same material to the base part 2 in succession therewith, however, thickness thereof is different. In addition, if needed, a soft implant material 15 may be mounted at the filling part 10 or cover an external shape, so as to form a thickness. Moreover, one portion of the filling part 10 may be mounted by the soft implant material 15, and a thickness of other portion may be adjusted thereto.

FIG. 4 is a sectional view of another golf glove which is similar to the golf glove of FIG. 1, according to other embodiment.

Referring to FIG. 4, besides the fact that the filling part 10 is formed in succession with the base part 2, the filling part 10 may be provided by attaching other leather or fabrics to the base part 2. The filling part 10 may be tailored to correspond to first knuckles of the thumb and the index finger, one portion of dorsal surface and palmar surface of the thumb and the index finger, and the lower part of the index finger and the thenar of the thumb of the palm. At this time, the tailored filling part 10 may be bound to the base part 2 by sewing or binding.

Moreover, the filling part 10 may be formed using synthetic resin. Synthetic resin may be coated for a region corresponding to the filling part 10 on the base part 2.

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As a result, there may be provided a resin coating layer corresponding to the filling part 10. At this time, a typical printing method may be used.

FIG. 5 is a front and rear view for explaining a soft implant material in golf gloves according to one embodiment of the present invention. FIG. 6 is a sectional view of the golf glove of FIG. 5.

Referring to FIGS. 5 and 6, the soft implant material 15 may be formed of variety of materials, such as leather, rubber, silicon, or the like. There may be provided golf gloves with variety of thickness, according to the golfer's level and taste.

Describing in a view of anthropotomy, the filling part 10 presses the finger ligament connected with the thumb and the index finger and the muscle of the palm naturally, so that the golfer may swing naturally in a relaxed condition as the golf glove provides the golfer with an effect straining the ligament and the muscle. Of course, to increase the effect, the soft implant material 15 is mounted at the filling part 10 meeting with the ligament and the muscle to increase strain sensation to the ligament and the muscle. The above effect may be discovered from a case in which lots of athletes tape the muscle and ligament line to reduce fatigue of the muscle.

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FIG. 8 is a side view for explaining an example of golf gloves according to one embodiment of the present invention. FIG. 9 is a plan view for explaining an example of general golf gloves of FIG. 7. FIG. 10 is a side view for explaining an example of golf gloves of FIG. 8.

Referring to FIGS. 7 and 9, a golfer grasps the golf club with the middle finger, the ringer finger, and the little finger of the left hand and the middle finger and the ring finger of the right hand. However, it is difficult for a beginner to grasp the golf club in the above way, and so, the beginner grasps the golf club by devoting his/her energies to all fingers. That is, when the beginner wants to apply the power to the three fingers of the left hand and the two fingers of the right hand, the power is applied from the little finger of the left hand to the whole arms and shoulders, and thereby, the beginner's whole body may get stiff and a natural swing is prevented. Therefore, the golfer may swing in a natural and stable posture and hit a ball at a long driver distance in an exact direction, only when the golfer swings in the proper grasping posture of the grip of the golf club, namely, without devoting his/her energies but with a high compactability to the grip of the golf club.

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A function of the present invention will be compared with that of the conventional golf gloves. Generally, the golfer grasps the grip of the golf club with the middle finger, the ring finger and the little finger of the left hand, and with the middle finger and the ring finger of the right hand. Referring to FIG. 7, when the golfer continuously grasps the grip of the golf club with the three weak fingers, the ligament connected with the fingers is fatigued, and thereby, the golfer may catch a chronic disease such as a trigger finger (Stenosing tenosynovitis), and the grip G of the golf club may be moved within the golfer's palm when loosening grasping power.

However, as illustrated in FIGS. 8 and 10, a side status of the grip after the golfer wears the glove shows that the thenar portion 13 of the thumb portion and the filling part 10 of the first knuckle portions 11 and 12 of the thumb portion and the index finger portion are thicker than the base part 2, so as to increase fixability to the grip G of the golf club even though the grasping power of the middle finger, the ring finger and the little finger is weak. That is, even though great power is not applied to the thumb and the index finger, compactability is applied to a portion closed through the grip of the golf club by the filling part 10 near the first knuckle portions 11 and 12 of the thumb portion and the index finger portion, and fixability to the grip G of the golf club may be increased by the filling part 10 of the thenar portion 13 of the thumb portion even though the grasping power of the middle finger, the ring finger and the little finger is weak.

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Therefore, the present invention may solve the problem of the trigger finger caused by burden of the finger ligament occurring when the golfer wears the conventional golf gloves and plays golf for a long time.

FIG. 9 shows a state in which the golfer wears the conventional golf glove and grasps the grip of the golf club. When the golfer wears the conventional golf glove and grasps the grip of the golf club, the grip of the golf club may be moved due to a gap 30 generated between the root between the thumb portion and the index finger portion and the grip G of the golf club. When the golfer tries to remove the gap 30 consciously to prevent the movement of the grip, it is difficult to do an exact swing because power is applied to the index finger and the thumb.

However, referring to FIG. 10, there is almost no gab by the filling part 10 between the index finger portion and the thumb portion. So, the present invention

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provides stability of the grip, and the root between the index finger portion and the thumb portion is naturally in a close contact with the grip even though the golfer does not try to closely contact the root portion to the grip consciously. Of course, it will be appreciated that additional soft implant material 40 having the same shape as the root between the index finger portion and the thumb portion may be inserted to increase fixability.

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FIG. 11 is a front and rear view for explaining golf gloves according to one embodiment of the present invention. FIG 12 is a side view for explaining an example of golf gloves of FIG. 11. FIG. 13 is a partially enlarged view for explaining a connection between a first filling part and a second filling part of FIG. 11.

Referring to FIGS. 11 to 13, a golf glove comprises the base part 2, a first filling part 52 and a second filling part 54. The base part 2 of general thickness and the exposed section of the base part 2 corresponds to a region including the little finger, the ring finger, the middle finger, a palm and a back hand of the left hand, wherein the palm and the back hand are connected with the three fingers. The first filling part 52 corresponds to a space 12a between the first knuckles of the thumb and the index finger, and one portion 12 of dorsal surface and palmar surface of the index finger, and is formed on the base part 2. In the meantime, the second filling part 54 is formed adjacent to the first filling part 52. At this time, the second filling part 54 corresponds to one portion 11 of dorsal surface and palmar surface of the thumb and the thenar portion 13 of the thumb.

Because the base part 2 for golf gloves is generally made using natural leather or synthetic leather, 3-4 sheets of tailored materials are connected by sewing. Therefore, a manufacturing process, i.e. sewing, should be considered to manufacture actual golf gloves. For this, according to the present embodiment, the filling part is divided into the first filling part 52 and the second filling part 54. Manufacturing processes may be facilitated by pre-binding the first filling part 52 and the second filling part 54 to the base part 2.

Accordingly, the second filling part 54 is bound to a portion corresponding to the thumb of the base part 2, by binding or sewing. The second filling part 54 covers dorsal surface and palmar surface 11 of the thumb and the thenar portion 13 thereof. In addition, the second filling part 54 is extended to the second knuckle portion 11a of

palmar surface of the thumb, thereby sticking the golf club and the thumb.

However, in case that a seam line is formed on a portion corresponding to the groove between the thumb and the index finger, the seam line may touch the golf club directly, which may disturb smooth movement of the golf club. Accordingly, the portion corresponding to the groove between the thumb and the index finger on the base part is extended toward the thumb portion, and the first filling part 52 that is bound to the dorsal surface and palmar surface 12 of the index finger is also extended to the groove portion 12a between the thumb and the index finger and covers the whole groove portion 12a. That is, the second filling part 54, not the seam line, contacts the golf club, whereby it is possible to maintain the uniformed side contact. In addition, the first filling part 52 may stably wrap the golf club in the portion corresponding to the groove between the thumb and the index finger.

The first filling part 52 and the second filling part 54 maintain the region corresponding to the groove between the thumb and the index finger, one portion of dorsal surface and palmar surface of the thumb and the index finger, and the thenar of the thumb, to be thicker than the base part 2. Therefore, this may give the golfer certain tension while the golfer grasps the golf club. Moreover, this removes the space between the club and the glove, thereby enabling a stabled grip.

Furthermore, the first filling part 52 is extended to the wrist portion 14, and the wrist portion 14 provides resistance to prevent bending of the golfer's wrist, thereby maintaining the fixing condition without applying power to the wrist.

As described above, the present invention may provide stability in the structure of the human body and help the golfers to play golf in a high-level posture.

# Industrial Applicability

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A golf glove of the present invention may provide a stabilized grip by using a filling part.

Furthermore, even when a beginner and a user who has thin fingers and palm grasp the grip of golf club, the golf glove of the present invention may prevent trigger finger, so that the users grasp the grip firmly without applying strong grasping power to the little finger, the middle finger, and the ring finger of the left hand.

Furthermore, even in a state where a golfer is relaxed, the present invention

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may provide the golfer with excellent compactability with the grip of the golf club, thereby helping the golfer to perform a stable swing, so as to drive a golf ball to a long distance, and may help users of golf gloves according to the present invention who enjoy a golf, to enhance their own stability and techniques, and thereby, the users may have strong success.

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As described above, the present invention has been described with reference to particular illustrative embodiments, it is not to be restricted by the embodiments but only by the appended claims. It will be apparent to those skilled in the art that variety of changes and modification will be possible without departing from the scope and spirits of the present invention.